

What is claimed is:

1. A fluoro-resin-coated quartz glass jig characterized by that the surface thereof is wholly covered with a pinhole-free fluoro-resin coating.

2. A fluoro-resin-coated quartz glass jig as claimed in Claim 1, wherein the fluoro-resin is at least one resin selected from tetrafluoroethylene resin, tetrafluoroethylene-perfluoroalkyl vinyl ether resin, perfluoroethylene-propylene resin, ethylene-tetrafluoroethylene resin, chlorotrifluoroethylene resin, ethylene-chlorotrifluoroethylene resin, vinylidene difluoride resin, vinyl fluoride resin, and tetrafluoroethylene-perfluorodioxol resin.

3. A fluoro-resin-coated quartz glass jig as claimed in Claim 1, wherein the thickness of the fluoro-resin coating is 50 μm or more.

4. A method for producing a fluoro-resin-coated quartz glass jig, comprising rounding all the edges of a quartz glass jig into curved portions each having a curvature (r) of 0.5 mm or larger, and forming a fluoro-resin coating on the entire quartz glass jig by treating the resulting jig with a fluoro-resin coating agent.

5. A method for producing a fluoro-resin-coated quartz glass jig, comprising applying a frost treatment to a quartz glass jig, and forming a fluoro-resin coating on the

entire quartz glass jig by treating the resulting jig with a fluoro-resin coating agent.

6. A method for producing a fluoro-resin-coated quartz glass jig as claimed in Claim 5, wherein the frost treatment is a surface treatment using a chemical agent.

7. A method for producing a fluoro-resin-coated quartz glass jig as claimed in Claim 5 or 6, wherein all the edges of the quartz glass jig are subjected to rounding to a curvature (r) value of 0.5 mm or larger before the frost treatment.

8. An apparatus comprising a jig of quartz glass having a surface, said surface being wholly covered with a pinhole-free fluoro-resin coating.

9. An apparatus as claimed in Claim 8, wherein the fluoro-resin coating is of at least one resin selected from the group consisting of tetrafluoroethylene resin, tetrafluoroethylene-perfluoroalkyl vinyl ether resin, perfluoroethylene-propylene resin, ethylene-tetrafluoroethylene resin, chlorotrifluoroethylene resin, ethylene-chlorotrifluoroethylene resin, vinylidene difluoride resin, vinyl fluoride resin, and tetrafluoroethylene-perfluorodioxol resin.

10. An apparatus as claimed in Claim 8, wherein the thickness of the fluoro-resin coating is 50 μm or more.

11. A method for producing a fluoro-resin-coated quartz glass jig, said method comprising:

rounding all edges of a quartz glass jig into curved portions each having a radius of curvature of 0.5 mm or larger, and

forming a fluoro-resin coating on the entire quartz glass jig by treating the resulting jig with a fluoro-resin coating agent.

12. A method for producing a fluoro-resin-coated quartz glass jig, said method comprising:

applying a frost treatment to a quartz glass jig, and

forming a fluoro-resin coating on the entire quartz glass jig by treating the resulting jig with a fluoro-resin coating agent.

13. A method for producing a fluoro-resin-coated quartz glass jig as claimed in Claim 12, wherein the frost treatment is a surface treatment using a chemical agent.

14. A method for producing a fluoro-resin-coated quartz glass jig as claimed in Claim 12, wherein all the edges of the quartz glass jig are subjected to rounding to a radius of curvature of 0.5 mm or larger before the frost treatment.

15. A method for producing a fluororesin-coated quartz glass jig as claimed in Claim 13, wherein all the edges of the quartz glass jig are subjected to rounding to a radius of curvature of 0.5 mm or larger before the frost treatment.